

In the Claims:

Please substitute the following claims:

Claim 1 (Currently amended). A method for predicting the responsiveness of a patient an individual to beta-blocker medications comprising genotyping the β_1 adrenergic receptor (β_1 AR) of said individual at codons 49 and 389, wherein the presence of the Ser49 and Arg 389 phenotype is indicative of a likely response to said beta-blocker medication.

Claim 2. Canceled

Claim 3 (Original). The method according to claim 1, wherein said beta blocker medications are selected from the group consisting of acebutolol, atenolol, betaxolol, bisoprolol, esmolol, metoprolol, long-acting metoprolol, carteolol, nadolol, penbutolol, pindolol, propranolol, long-acting propranolol, sotalol, timolol, labetalol, salts thereof, and combinations thereof.

Claims 4-8. Canceled

Claim 9 (New). The method according to claim 1, wherein said patients are homozygous for the presence of Ser49.

Claim 10 (New). The method according to claim 1, wherein said patients are homozygous for the presence of Arg389.

Claim 11 (New). The method according to claim 1, wherein said patients are homozygous for the presence of Ser49 and Arg389.

Claim 12 (New). A method for predicting the responsiveness of an individual to beta-blocker medications comprising genotyping the β_1 adrenergic receptor (β_1 AR) of said individual at codon 49, wherein the presence of a homozygous Ser49 phenotype is indicative of a likely response to said beta-blocker medication.

Claim 13 (New). The method according to claim 12, wherein said beta blocker medications are selected from the group consisting of acebutolol, atenolol, betaxolol, bisoprolol, csmolol, metoprolol, long-acting metoprolol, carteolol, nadolol, penbutolol, pindolol, propranolol, long-acting propranolol, sotalol, timolol, labetalol, salts thereof, and combinations thereof.

Claim 14 (New). A method of treating hypertension comprising the steps of:

- a) genotyping the β_1 adrenergic receptor (β_1 AR) of an individual at codons 49 and 389; and
- b) prescribing a beta-blocker medication to said individual when the individual is homozygous for the Ser49 phenotype or has a Ser49/Arg 389 phenotype.

Claim 15 (New). The method according to claim 14, wherein said individual is homozygous for the Ser49 phenotype.

Claim 16 (New). The method according to claim 14, wherein said individual is homozygous for the Ser49/Arg 389 phenotype.